CA 2336808	AA	20000120	CA 1999-2336808	19990621
AU 9947003	A1	20000201	AU 1999-47003	19990621
AU 755280	B2	20021205		
EP 1097171	A1	20010509	EP 1999-930467	19990621
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002520338	T2	20020709	JP 2000-559150	19990621
NZ 509257	A	20030328	NZ 1999-509257	19990621
HK 1037643	A1	20050527	HK 2001-108725	20011212
[redacted] APPLN. INFO.:				A1 19980710
				A1 19950323
				A2 19950602
				B2 19950607
				W 19990621

ED Entered STN: 23 Jan 2000

AB A method for producing a purified Hb product includes loading a Hb solution onto an anion exchange chromatog. column. At least one tris(hydroxymethyl) aminomethane **acetate** buffer solution is injected into the column. The buffer solution has a pH lower than that of the column, whereby a purified Hb product elutes from the column. In one embodiment, the Hb solution initially can be equilibrated at a pH of greater than about 8.7. In another embodiment, contaminants can be removed by equilibrating the column with at least about eleven column void vols. of buffer solution at an intermediate pH of between about 8.2 and about 8.6, to thereby form a stepped pH gradient. In still another embodiment, all buffer solns. employed are tris(hydroxymethyl) aminomethane **acetate**. A stable polymerized Hb blood substitute was prepared from bovine whole blood and purified on a quaternary ammonium anion exchange resin with Tris-**acetate**.

IT **9012-36-6, Agarose**
RL: NUU (Other use, unclassified); USES (Uses)
(as anion exchange resin; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

RN 9012-36-6 HCAPLUS

CN Agarose (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IC ICM C07K014-805

CC 9-3 (Biochemical Methods)
Section cross-reference(s): 63

ST Hb anion exchange chromatog Tris **acetate**; polymd Hb blood substitute

IT Exercise
(Hb blood substitute effect in, in humans; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT **Anion exchange chromatography**
Anion exchangers
Blood
Blood substitutes
(Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT Hemoglobins
RL: PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT Silica gel, uses
RL: NUU (Other use, unclassified); USES (Uses)

(amine- or ammonium-containing, as anion exchange resin; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT Toxins
RL: REM (Removal or disposal); PROC (Process)
(endotoxins, removal of; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT Hemoglobins
RL: PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polymerized; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT Silica gel, preparation
RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(reaction products, with γ-glycidoxypropylsilane and alkyl ammonium **chloride** compound, as quaternary ammonium anion exchange resin; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT Phospholipids, processes
Proteins, general, processes
RL: REM (Removal or disposal); PROC (Process)
(removal of; Hb **purification** by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT 7782-44-7, Oxygen, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Hb blood substitute improvement of delivery of, in humans; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT 6850-28-8, Tris **acetate**
RL: NUU (Other use, unclassified); USES (Uses)
(Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT 9003-05-8, Polyacrylamide 9003-70-7 9004-54-0D, Dextran, crosslinked, uses **9012-36-6**, **Agarose** 25249-16-5
RL: NUU (Other use, unclassified); USES (Uses)
(as anion exchange resin; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT 1344-28-1, Alumina, uses 13463-67-7, Titania, uses
RL: NUU (Other use, unclassified); USES (Uses)
(gel, as anion exchange resin; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

IT 7766-33-8 65845-57-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of quaternary ammonium anion exchange resin; Hb purification by anion exchange chromatog. with tris(hydroxymethyl) aminomethane **acetate** buffer)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L173 ANSWER 25 [redacted] COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:819495 HCAPLUS
DOCUMENT NUMBER: 134:2317
TITLE: Method for purifying hemoglobin by anion exchange chromatography using tris(hydroxymethyl) aminomethane **acetate** buffer
INVENTOR(S): Houtchens, Robert A.; Rausch, Carl W.
PATENT ASSIGNEE(S): Biopure Corp., USA